

CLAIMS

1. Process installation with a plurality of field devices, which exchange data with a control room via a signal line SL, wherein the signal line SL is designed for a conventional first data transmission technology having a low data transmission rate (smaller than 10,000 baud), characterized in that at least one field device, for data exchange, operates with a second data transmission technology, which permits a greater data transmission rate and/or an expanded functionality than the first transmission technology, and which uses, as communication medium, the existing signal line.

2. Process installation as claimed in claim 1, characterized in that the first and second data transmission technologies use separate data transmission channels occupying different frequency bands.

3. Process installation as claimed in one of the preceding claims, characterized in that the first data transmission channel occupies a frequency band up to 4 kHz, and the second data transmission channel occupies a frequency range greater than 4 kHz.

4. Process installation as claimed in one of the preceding claims, characterized in that the signal line SL is a 2-wire line.

5. Process installation as claimed in one of the preceding claims, characterized in that the signal line SL is a copper 2-wire line with a bandwidth of about 1 MHz.

6. Process installation as claimed in one of the preceding claims, characterized in that the first data transmission technology operates according to an industrial standard, e.g. Whessoematic WM550, Varec Mark/Space, Sakura V1, Tiway, Profibus, HART, FF.

7. Process installation as claimed in one of the preceding claims, characterized in that the second data transmission technology corresponds to DSL (digital subscriber line) technology.

8. Process installation as claimed in one of the preceding claims, characterized in that the process installation, is a tank farm with a plurality of tanks LC1, LC2, LC3, LC4, LC5 for containing liquid.

9. Method for modernizing a process installation with a plurality of field devices, which exchange data with a control room CR via a signal line SL,

characterized in that older field devices which transmit data to a control room according to a first transmission technology are replaced by new field devices, which work according to a second transmission technology, wherein the data transmission according to the second transmission technology occurs in a second channel on the existing signal line SL, so that the data transmission signals of the different transmission technologies do not influence one another.

10. Method for communication in a process installation with a plurality of field devices, characterized in that an existing signal line SL for a first transmission technology is used also for a second transmission technology.